



THE ROCKEFELLER UNIVERSITY

1230 YORK AVENUE

NEW YORK, NY 10021

April 7, 1987

JOSHUA LEDERBERG

PRESIDENT

Dr. Stephen M. Mount  
Department of Biological Sciences  
Sherman Fairchild Center for the Life Sciences  
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New York, New York 10027

Dear Dr. Mount:

Thank you for your comment in your letter of April 1.

As far as I can see your response only confirms the point that I was trying to make (but evidently did not communicate very successfully): like the 1890s for medical science, we today have a pretty clear idea of the agenda, namely the most cogent issues are for biological research. You stated them yourself. We also have a pretty good idea of the methodology needed to pursue it. Both of those conditions, especially the latter, make this time very different from that of biology 50 years ago, when we didn't have the foggiest idea how we were to get at the chemistry of the gene. Nor was the question very well stated.

I don't <sup>dis-</sup>agree with you about the brute force approach to sequencing the human genome; like you, I would focus on the islands of opportunity (see enclosure).

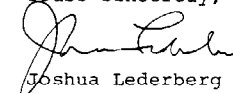
The exploration metaphor does have some validity (although any metaphor can be treacherous if misapplied): we have recently discovered a new continent, and we are looking about for the best strategy of further exploitation. A one or ten kilometer resolution overview of the territory of North America would substantially help our further efforts to try to locate the various elements of terrain, the biota, the habitated areas. More dubious at this stage would be a one meter resolution map of the entire expanse, (at approximately the cost of the human genome sequencing project; the analogue of satellite photography will have its place when the technology catches up). I think you are responding to the propaganda for the sequencing project rather than to the theme that I was trying to express.

Dr. Stephen M. Mount  
April 7, 1987

- 2 -

Yes, I will certainly applaud you if you emulate Francis Ryan!

Yours sincerely,

  
Joshua Lederberg

*A.S. Ann Rev. Genetics  
1988 will have a  
prefatory chapter  
on 1946*

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21